Carex (rostrata, utriculata) - Carex lacustris - (Carex vesicaria) Herbaceous Vegetation (Northern Sedge Wet Meadow)

COMMON NAME	Swollen-beak Sedge - Hairy Sedge - (Inflated Sedge) Herbaceous Vegetation
SYNONYM	Northern Sedge Wet Meadow
PHYSIOGNOMIC CLASS	Herbaceous Vegetation (V)
PHYSIOGNOMIC SUBCLASS	Perennial graminoid vegetation (V.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar grassland (V.A.5)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (V.A.5.N)
FORMATION	Seasonally flooded temperate or subpolar grassland (V.A.5.N.k)
ALLIANCE	CAREX (ROSTRATA, UTRICULATA) SEASONALLY FLOODED HERBACEOUS ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM PALUSTRINE

RANGE

Voyageurs National Park

This community type occurs in beaver meadows, along lake shores and slow moving streams, and in isolated basins throughout the park.

Globally

This association is found in Iowa, Michigan, Minnesota, Wisconsin, Manitoba, Ontario, and possibly North and South Dakota.

ENVIRONMENTAL DESCRIPTION

Voyageurs National Park

This community type occurs in beaver meadows, along lake shores, along slow moving streams and in isolated basins. Substrate is most often deep sedge peat under various stages of decomposition, or shallow (5-10 cm) peat over clay. A thick thatch layer over the peat may be present. The peat mat may occasionally be floating. Standing dead trees, especially in beaver meadows, are common. Hummock and hollow microtopography is usually well developed. Standing water is common in the hollows. The water regime is highly variable, ranging from saturated to permanently flooded.

Globally

Sites are found on floodplains, shallow bays of lakes and streams, beaver meadows, ditches, and occasionally in isolated basins, or on semi-floating mats. Hydrology is seasonally to semipermanently flooded. Substrate is mineral soil or well-decomposed peat (Curtis 1959, Harris *et al.* 1996). Standing dead trees, especially in beaver meadows, are common. Hummock and hollow microtopography is usually well developed, with standing water often in the hollows. The water regime is highly variable, ranging from saturated to permanently flooded (M. Smith personal communication 1999).

MOST ABUNDANT SPECIES

Voyageurs National Park

Stratum	Species
Graminoid	*Carex lacustris, Carex vesicaria, Carex rostrata*

Globally

Stratum	Species
Graminoid	*Carex rostrata, Carex lacustris, Calamagrostis canadensis*
Forb	*Eupatorium maculatum*

CHARACTERISTIC SPECIES

Voyageurs National Park

Carex rostrata, Carex lacustris, Carex vesicaria

Globally

Carex rostrata, Carex lacustris, Carex vesicaria, Eupatorium maculatum

VEGETATION DESCRIPTION

Voyageurs National Park

Northern Sedge Wet Meadow is most commonly dominated by *Carex lacustris* with *Carex rostrata, Carex vesicaria, Calamagrostis canadensis, Typha* spp., *Calla palustris* and/or *Scirpus cyperinus* often present at low cover. In some circumstances, *Carex rostrata* and/or *Carex vesicaria* may share dominance with *Carex lacustris* or obtain complete dominance. Cover of this herbaceous layer is usually 90-100%. Shrubs of *Alnus incana, Chamaedaphne calyculata,* or *Salix* spp. may be found at low cover (<25%). Stands with standing water or water channels running through them may contain species typical of wetter conditions like *Brasenia schreberi* or *Potamogeton* spp. In most circumstances, the moss layer is virtually absent. In the uncommon cases where sedges are colonizing a peatland, however, the moss strata can be 20-90% cover of *Sphagnum* spp.

Globally

Tall coarse-leaved sedges dominate the vegetation layer, often creating a tussocky hummock microtopography. Shrubs can cover up to 25% of the area. Pools with submergents may also be present. Dominant graminoids include a number of Carices, including *Carex aquatilis, Carex lacustris, Carex lasiocarpa, Carex rostrata, Carex vesicaria*, and locally *Carex stricta*. Other graminoids include *Calamagrostis canadensis, Scirpus atrovirens, Scirpus cyperinus*, and, in wetter areas, *Eleocharis smallii* and *Equisetum fluviatile*. Forbs include *Acorus calamus, Aster simplex, Campanula aparinoides, Eupatorium maculatum, Iris shrevei, Lycopus uniflorus, Poa palustris, Polygonum amphibium, Potentilla palustris*, and others (Curtis 1959, Harris *et al.* 1996). Stands with standing water or water channels running through them may contain species typical of wetter conditions like *Brasenia schreberi* or *Potamogeton* spp. In most circumstances, the moss layer is virtually absent. In the uncommon cases where sedges are colonizing a peatland, however, the moss strata can be 20-90% cover of *Sphagnum* spp. (M. Smith personal communication 1999).

CONSERVATION RANK G4G5Q.

DATABASE CODE CEGL002257

COMMENTS

Voyageurs National Park

Diagnostic features of the type are greater than 40% cover of *Carex lacustris, Carex rostrata*, and/or *Carex vesicaria*. It is analogous to Ontario's W12 (Harris *et al.* 1996). The sedges in this community can occasionally occur mixed with *Typha* spp. and *Calamagrostis canadensis*, grading into the Midwest Cattail Marsh and the Eastern Bluejoint Marsh respectively. When *Carex* spp. occurs mixed with *Typha* spp., there must be >60% cover of cattails for the stand to be considered a Midwest Cattail Marsh. Up to this point, the stands usually retain more characteristics of a Northern Sedge Wet Meadow than of a Midwest Cattail Marsh. When *Carex* spp. are mixed with *Calamagrostis canadensis*, the dominant species (or genera) will determine the appropriate community. Occasionally, a Speckled Alder Swamp or other shrub type may invade over a Northern Sedge Wet Meadow. In these circumstances, the shrubs must obtain greater than 25% cover for the stand to be considered a shrub type.

Stands dominated by *Carex lasiocarpa* are not included here. See Wiregrass Sedge Shore Fen or Northern Poor Fen

This community is subject to disturbance by beaver activity. In recently flooded beaver ponds, small patches of Northern Sedge Wet Meadow may occur interspersed with small patches of Northern Water Lily Aquatic Wetland. The Northern Sedge Wet Meadow tends to be intermediate in moisture tolerance between the wetter Midwest Cattail Marsh and the drier Eastern Bluejoint Marsh.

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